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MERCHANDISING HANGER

RELATED APPLICATION

This application claims priority of United States Provisional Patent Application Serial No. 60/463,664 filed April 17, 2003, which is incorporated herein
5 by reference.

FIELD OF THE INVENTION

The present invention generally relates to merchandising hangers, and in particular to merchandising hangers for portable electronic accessories.

BACKGROUND OF THE INVENTION

10 A merchandise hanger allows a retailer to efficiently display a suspended article while affording a customer an opportunity to handle the merchandise. The opportunity for a customer to come into physical contact with the merchandised article is especially beneficial in the context of portable electronic device accessories that must be compatible with a given device. Typically, a hanger is molded from
15 synthetic plastic materials configured as a shallow profiled strip. Such plastic strips often integrate intermediate between the hanger portion and the merchandise engaging portion an identification display mounting card. While merchandising hangers are well suited to provide consumer interactivity, such hangers are particularly susceptible to theft and damage owing to the ease in which a stud is
20 released from a securing aperture that together form the suspension loop for the

merchandised article. Thus, there exists a need for a merchandising hanger that is resistant to tampering.

SUMMARY OF THE INVENTION

5 A merchandising hanger is described that has a planar surface adapted to receive printed indicia thereon and characterized by having a top and a base. The top of the planar surface is formed as a hook, cutout, or hole so as to allow the merchandising hanger to be suspended from a conventional merchandising rack. A tab extends from the base of the planar surface and includes a stud integral with the tab and a stud-receiving aperture in another portion of the tab. The aperture has a
10 flange associated therewith. Intermediate between the stud and the aperture is a tab portion having a thickness less than the tab portion proximal to the planar surface. The relative thicknesses of tab portions and the interaction between the stud and complementary aperture afford a theft deterrent without compromising the merchandising function.

15 BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of an inventive merchandising hanger;

Figure 2 is a right side planar view of a hanger depicted in Figure 1;

Figure 3 is a rear view of the hanger depicted in Figure 1;

Figure 4 is an enlarged cross-sectional view showing the stud and securing
20 aperture portions of an inventive hanger as depicted in Figure 1; and

Figure 5 is a right side planar view of an alternate embodiment of an inventive hanger.

DESCRIPTION OF THE INVENTION

Referring to Figure 1, an inventive hanger is shown generally at 10 formed of
5 a one-piece body of plastic material having a planar surface 12 adapted to receive
printed indicia thereon. The flat planar surface 12 has a top forming a hook or cutout
14 configured to receive a conventional merchandising rod therethrough. The planar
surface 14 has a basal surface 16 with a tab 18 extending therefrom. The tab 18 has a
stud 20 projecting from a first tab portion 22. The stud 20 preferably having a cubo-
10 hedral body 24 terminating in a conical head 26. Preferably, the conical head 26 is
hemispherical. A second tab portion 28 has a thickness less than the first tab portion
22 and interconnects the first tab portion with a third tab portion 30. The third tab
portion 30 has an aperture 32, the aperture 32 adapted to pressure fit over the conical
head 26 and thereby secure the third portion 30 against the first portion 22 and in the
15 process forming a loop in which an article is connected. More preferably, the
aperture 32 contains a deformable flange 34 shown in an enlarged view of Figure 4.
More preferably, the deformable flange 34 forms a pair of opposing portions 34a and
34b that are generally parallel with the elongate side 25 of stud body 24. The flange
34 is intended to deform away from the conical head 26 upon the third tab portion
20 being pressed against the stud 20. Upon the head 26 being pressed beyond flange 34,
the flange 34 remains deformed as the body 24 of the stud 20 encompasses the

aperture 32. The flange 34 abuts the rearward face 36 of the head 26 in order to inhibit disengagement between the aperture 32 and the stud 20. Optionally, the head 26 is heat stamped or pressure flattened after engaging the aperture 32 to preclude casual disengagement (not shown).

5 According to the present invention, the thickness of the tab portions has a ratio between first portion:second portion:third portion of 1.5-3.5:1:1.3-2.5. More preferably, the ratio of first portion:second portion:third portion of the tab 18 is between 2.0-3.0:1:1.3-2.0. The relative thickness of the planar surface 12 relative to the first portion 22 is between 0.5-2.0:1.0. Preferably, the planar surface 12 and the
10 first portion 22 are of a thickness that varies between the two by less than 20%. More preferably, the thickness of the first portion 22 is between 1.5 and 3.0 millimeters in thickness. While it is appreciated that strength characteristics of the injection moldable plastic from which an inventive hanger 10 is made somewhat modifies the optimal thickness thereof. Suitable thermoplastic materials from which an inventive
15 hanger is formed illustratively include materials like or similar to polyethylene, polypropylene, polycarbonate and acrylonitrile butadiene styrene.

Optionally, in the region where the body 24 of the stud 20 extends from the first tab portion 22, at least one opening 38 is provided in the first tab portion 22 adjacent to the base 24 of the stud 20. Preferably, there are two openings 38 on either
20 side of base sides 25. The openings 38 are preferably present in the instances where

the thermoplastic melt has a viscosity that requires additional pressure to urge material into the form of the stud 20.

It is appreciated that the relative location of the stud and securing aperture are readily reversed consistent with the present invention as shown in Figure 3 where an
5 alternate embodiment of a hanger is shown generally at 50. With respect to Figure 3, like numerals denote portions as described previously with respect to the embodiment depicted in Figures 1-4.

Referring now to Figure 5, a securing aperture 32 having a flange 34 internal thereto. The aperture 32 residing in a first tab portion 52 that extends from a planar
10 surface 12. A second tab portion 28 is intermediate between the first tab portion 52 and a third tab portion 60. The third tab portion 60 having a stud 20 extending therefrom. The cross-sectional thickness ratio of the first portion:second portion:third portion of the hanger 50 and the relative portion thicknesses are those detailed with respect to the inventive embodiment detailed with respect to Figures 1-4.

15 Although the present invention has been described relative to preferred embodiments thereof, one skilled in the art will readily appreciate that other variations and modifications will be apparent that nonetheless remain within the spirit of the invention. It is intended that the present invention not be limited by the specific disclosure herein but only by the appended claims.